ABSTRACT OF THE DISCLOSURE

Metallic substrates having a deformable vitreous coating, obtainable by applying an alkali metal silicate-containing coating sol to the substrate and thermally densifying the layer thus obtained in a two-stage heat treatment process, the heat treatment being carried out, in the first stage, either (A) in an oxygen-containing atmosphere or (B) in a vacuum at a residual pressure of ≤ 15 mbar and, in the second stage, in a low-oxygen atmosphere up to full densification with formation of a vitreous layer.